

LIBRARY

JUN 1919

LIBRARY

Applications of Psychiatry to Industrial Hygiene

By

STANLEY COBB, M.D.

Boston

Assistant Neurologist, Massachusetts General Hospital, and Neuro-
Psychiatrist in Industrial Hygiene, Harvard Medical School

MASSACHUSETTS SOCIETY FOR MENTAL HYGIENE
1132 Kimball Bldg., 18 Tremont St., Boston

Publication No. 38

YALE MEDICAL LIBRARY



3 9002 01049 2800

Hist
RA 190
M24
38
1919
Locked

T10
M24

Harvey Cushing / John Hay Whitney
Medical Library

HISTORICAL LIBRARY



Yale University

APPLICATIONS OF PSYCHIATRY TO INDUSTRIAL HYGIENE*

STANLEY COBB, M.D.

Assistant Neurologist, Massachusetts General Hospital, and Neuro-Psychiatrist in Industrial Hygiene, Harvard Medical School

WE are nowadays being constantly reminded that we stand on the threshold of a reconstruction period. Warnings and advice emanate from varied sources—statesmen, financiers, industrial leaders and unemployed workers. A glance at the daily papers shows us that social unrest and industrial discontent are problems of immediate importance. A study of the more technical literature in the fields of political economy, education, industrial management, psychology, medicine, and social service, shows that a great many people are thinking, and thinking intelligently, about these problems. The hopeful aspect of the situation is that, whether the point of view is that of the industrial manager trying to reduce labor turnover or that of the physiologist investigating fatigue, there is shown a feeling of broad humanitarianism, a desire to understand each member of the industrial system as an individual, and a reaction against the old system of exploiting labor to produce wealth.

It is in just this field of understanding, the individual worker and his reaction, that psychiatry is of use. Carleton Parker (1) even goes so far as to say that: "Modern labor unrest has a basis more psychopathological than psychological, and it seems accurate to describe modern industrialism as mentally insanitary." Some causes of this mentally insanitary condition are brought out by Marot (2) in a book entitled *Creative Impulse in Industry*. Modern business enterprise and machine technology are said to have extinguished the joy of the creative experience; craftman-

* Received for publication August 25, 1919.

ship is a thing of the past; an article owes its existence to an infinite number of persons, and a worker's claim to the product of his labor is merged in an infinity of claims which totally impersonalizes the industry. The worker has become a mere factory attachment, and surrenders himself to the rhythm of the machine. Thus creative desire has been lost and the only reason left for laboring is the predatory desire to possess wealth—to get paid off and to do as little work as possible for as large a reward as possible. But this is only one of many difficulties. Among the economists, Parker has been the pioneer and has most vigorously preached the necessity of understanding human behavior, and especially industrial behavior, from an individual standpoint. In his paper, *Motives in Economic Life* (1) he says: "We economists speculate little on human motives. We are not curious about the great basis of fact which dynamic and behavioristic psychology has gathered to illustrate the instinct stimulus to human activity. Most of us are not interested to think of what a psychologically full or satisfying life is. . . . Our economic literature shows that we are but rarely curious to know whether industrialism is suited to man's inherited nature, or what man in turn will do to our rules of economic conduct in case these rules are repressive." When human motives are isolated, described, and compared, such phenomena as business confidence, the release of work energy, the decay of workmanship, decline in the thrift habit, and labor unrest may be analyzed with some intelligence. But the careless *a priori* deductions touching human nature which still dominate our orthodox texts must be discarded. As a substitute for the orthodox and vague concept of human nature Parker gives a list of "some sixteen instinct unit characters which are present under the laborer's blouse and insistently demand the same gratification that is, with painful care, planned for the college student."

In his analysis of the I. W. W. Parker (3) shows that thwarting these instincts and condemning the worker to a life of limited happiness, restricted personal development, and desolation when sick, brings about a state of mind

which amounts to an industrial psychosis. He says the I. W. W. is purely a symptom, and can be "profitably viewed only as a psychological by-product of the neglected children of industrial America." In other words we must treat these "mentally insanitary" conditions not only by shortening hours and increasing pay, but by so educating the children that they will be able to use their time off in ways that give constructive satisfaction to the instinctive cravings we all have for gregariousness, productiveness, motherliness, exercise of initiative, acquisition, ostentation, etc.

Other economists are taking up a similar point of view: Taussig (4) has shown that the pay envelope is not a satisfactory motive for work—other satisfactions are equally or more important. Irving Fisher (5) looks forward to the day when we will have a truer understanding of the nature of human freedom, saying: "What we liberty lovers are really groping for is, apparently, not to do as we think we please, but to do what will actually please us after it is done; that is, to satisfy fairly well all of the great fundamental human instincts, of which there are many besides the instinct of self-preservation or of making a living. The workman not only longs for more pay, but he hungers and thirsts for other things which he cannot formulate, because so largely unconscious." Tead (6) sounds the same note in his discussion of labor unrest, saying that a considerable part of it is really pathological and "might be called a definite industrial psychosis." Veblen, Wolf and others are writing in a similar strain. So it appears that the economists are becoming psychiatrists and are showing the way to the physician. If the physician is to take his rightful place in developing the mental hygiene of industry he must forget orthodox psychiatry (as the economist seems to be forgetting cut and dried political economy) and interest himself in a dynamic, individual psychology which recognizes the essentials of human nature and at last begins to analyze for us the elements of which human nature really consists, looking on each case as a human experiment in reaction to environment.

Sarah Murphy, aged 43, Catholic, a fur sewer in a department store in Boston, comes into the out-patient department of the Massachusetts General Hospital complaining of pain and numbness of her right hand. She goes to the medical, neurological, and industrial clinics, and after several visits acquires the diagnosis of "Occupational Neurosis." The social service department then takes her in hand, and finds out that the numbness of her hand began at about the time her oldest son went to France. Just previous to his departure he had married a Protestant girl, and because of his mother's antagonism to the match, the ceremony had been secretly performed in a Protestant church and the mother had not been informed until afterwards. The patient was in the habit of getting breakfast and supper for her other two sons whom she was educating in technical schools. Beside this she worked all day at the store. On Sundays she was too tired to do anything, but dragged herself to church as a duty. It was found possible to send her away for a two weeks' rest, a scholarship was procured for one son, and a job for the other whereby he was enabled to pay for his own tuition. With this relief, and a superficial explanation that her trouble was due to work and worry, a cure was brought about.

Anyone interested in the psychogenesis of mental breakdowns can easily see the mechanism; the emotional shock of the older son's marriage taking the joy out of the mother's life; the feeling of self-pity arising from her long hours of work, the feeling that the situation was intolerable, and the inability to face this situation, all finally tended to bring about the hysterical escape through the development of her symptoms. This is exactly the mechanism we have become so familiar with in the war neuroses. And if the department store physician had been interested in psychiatric problems, a half hour's interview, a visit or two of the nurse to the home, and the cure would have been brought about expeditiously without recourse to the necessarily slow and cumbersome diagnostic machine of a great hospital; and both the store and the patient would have been saved some weeks of work. Such cases can be found everywhere, our

wards and dispensaries are full of patients to whom the doctors apply long meaningless labels—"neurasthenia," "psychasthenia," "psychoneurosis"—and for whom they do little. By an investigation of the patient's personal problems, an understanding of the usual reactions of the human being, and by simple help in readjusting the patient to the environment, a great deal can be done.

It is not only the cases of illness that should be attacked in this way. Many people with similar unbearable situations do not develop the usual symptoms that we recognize as illness. They merely become inefficient, restless, wander away from their jobs, or become radicals and bolshevists (7). Peabody (8) and his collaborators found an interesting example of this in the cases of Effort Syndrome studied at U. S. A. General Hospital No. 9. A striking number of the histories showed that in civil life these men drifted from one employment to another, never breaking down enough to consult a physician, but adding their number to the shifting, inefficient labor element so costly to employers. It took the rigor of army life, with no possibility of escape by moving on, to bring out their symptoms. Before these people have left their work or have been fired for inefficiency, they should be interviewed by someone competent to understand them and their probable troubles. At such times advice from a physician, the loan of some money, a visit to a sick child or wife, or any of the thousand possible personal and individual aids, might save the worker from becoming soured, keep him from joining the ranks of the discontented, and prevent the development of a litigant and paranoid personality. Employment managers are beginning to recognize these facts and are using various methods to alleviate the troubles: one firm employs a lawyer especially to watch the loan sharks and help out employees in financial difficulty. Others keep man-record charts (9) and watch carefully the workers' efficiency. Too often this is merely for purposes of sizing up the employee, but one firm has shown that frequently a drop in a man's efficiency can be traced to personal difficulties of a nature that can be helped.

So we get back to the necessity of understanding human nature and of giving to the fundamental human cravings an outlet. The instinct of self-preservation is partially satisfied with the pay envelope; welfare work helps to make possible satisfaction of the instinct of home-building; but with our present industrial system it is harder to see how the cravings for self-assertion, creation, excitement, and the like can be met. The atmosphere created by the division of labor and scientific management is repressive to all these instincts—the man may develop a feeling of inferiority, and unless given some outlet he will become discontented and get satisfaction through striking, drinking or other abnormal sublimation. These are mental problems and must be so looked upon by physicians interested in mental hygiene, but the whole problem is so complex that at present most industrial physicians will consider it more expedient to watch for the psychotic symptoms to appear in individuals and then do their best to treat them sympathetically in the light of their knowledge of industrial psychology.

The recent work done in the personnel department of the army has awakened wide interest in the possibility of applying mental tests to applicants for industrial positions. The ultimate aim is to fit the job to the man so well that discontent will be minimized and labor turnover reduced. Ball (10) advocates the establishment of laboratories for the thorough medical and psychological examination of all employees; he believes that in this way men can be fitted immediately to the right occupation, without the costly experiment of trial. Although his paper reads well, it is not convincing and the methods advocated seem generally impracticable. In the army work, however, the psychologists certainly showed that they could pick out the capable men by comparatively short group tests, and Ball gives outlines of similar tests. In a more restricted way mental tests have been applied in industry for some years. Jaques (11) had excellent results in choosing typists and stenographers for certain types of work by psychological tests, and the results of these tests correlated well with the output later shown by these employees. Lamb (12) also reports success in

gaining better judgment for selection and placement of employees by intelligence tests. On the other hand, Kelly (13) exposes some fallacies of the army rating system, especially in its application to industry. Strictly speaking, these tests have psychiatric interest only when used for the detection of subnormal individuals, but they seem to be of value from the prophylactic standpoint in reducing misfits in the shops—and maladaptation to environment is the basis for many mental breakdowns. In the present state of our knowledge perhaps Johnson's (14) suggestion is the best: he recommends that factory training departments be installed in all plants as testing places for applicants for factory work. And he claims that by thus eliminating incompetent and unqualified candidates the morale of the departments is kept at a higher level and labor turnover is decreased.

Fatigue is another subject that comes into the field of industrial psychiatry. A great deal of work has been done by physiologists on neuro-muscular fatigue, and by the psychologists on mental fatigue. Spaeth (15) has recently reviewed the whole subject thoroughly and brought the two points of view together. Though a biological physiologist, he has given the psychological element in fatigue its just due. He states that laboratory subjects and industrial subjects are absolutely incomparable units. He uses the term "industrial fatigue" for the daily and weekly weariness resulting from industrial work, and suggests the term "industrial psychoneurosis" for the "gradually accumulating fatigue of the over-driven industrial worker." Overwork, however, is not the fundamental cause of neurosis or psychoneurosis. These disorders are fundamentally emotional breakdowns due to lack of satisfaction with life, so the theory that the etiology is "gradually accumulating fatigue" is untenable. The symptoms may simulate fatigue, but neuro-muscular fatigue is cured by simple rest, and these conditions are not. "Industrial psychoneuroses" are simply neuroses with an occupational coloring due to the work in which the individual happens to be engaged.

The mechanism of such a neurosis is typically something

like this: An individual is in an intolerable situation which he is constitutionally unable to dominate; the reaction of a neurosis sets in with depression of spirits, irritability, preoccupation, self-pity, etc., but a conventional cause for the decreased efficiency must be found to rationalize the situation, so the individual calls it overwork. Obviously with this idea of overwork in mind the symptom usually acquired is fatigue or asthenia, but frequently symptoms more closely associated with the work are developed, such as paralysis of parts of the body necessary for work, muscular pains making work impossible, tremors, or even epileptiform seizures. The case quoted above is an example of emotional breakdown from personal causes taking on an occupational symptomatology. The work may have determined the form of the symptoms but there is no evidence that it had much to do with the development of the trouble. Work may of course be an etiological factor, but not through so simple a mechanism as accumulated fatigue. Work that represses emotional cravings often brings out neuroses, just as satisfactory work is the greatest curative agent we have for these conditions. Let us no longer fool ourselves into thinking that overwork, *per se*, is the cause of mental breakdown.

To sum up, the problems of industrial psychiatry are:

A. Prophylaxis of mental breakdowns by adapting the worker to his environments, and eliminating causes of discontent.

B. Treating psychiatric cases when they arise in a rational way according to the facts of each case, and considering as psychiatric phenomena many forms of behavior that until recently have been given unsympathetic names, e. g., "the groucher," "the kicker," "the trouble maker," and "the hobo."

As conditions are at present, a reasonable application of psychiatry to industry would seem to be the following:

1. Physical examination of all applicants for work.
2. Mental examination by (a) a period of training and observation, or (b) through mental tests.

3. Keeping in personal touch with employees' individual problems by means of (a) good foremen, (b) a system for watching individual efficiency, or (c) a sympathetic staff with a psychiatric point of view in the employment management office, thus salvaging the men who might otherwise be fired.

4. Training the industrial physician to a knowledge of how human nature is constituted, not in conventional terms, but in the light of a dynamic and living psychology that considers the behavior of human beings in terms of instinctive sources of energy, integrated into motives, these motives needing outlet through energy transformation into *satisfactory* activity.

BIBLIOGRAPHY

1. Parker, C. H.: Am. Econ. Rev., 1918, Supplement to, **8**, 212.
2. Marot, H.: Creative Impulse in Industry, New York, 1918.
3. Parker, C. H.: Atlantic Monthly, 1917, **120**, 651.
4. Taussig, F. W.: Inventors and Money Makers, New York, 1915.
5. Fisher, I.: Am. Econ. Rev., 1919, **9**, 17.
6. Tead, O.: Instincts and Industry, Boston, 1918.
7. Field, F. L.: Ind. Management, 1919, **58**, 75.
8. Peabody, F. W.: Personal communication.
9. Gantt, H. L.: Ind. Management, 1919, **58**, 89.
10. Ball, J. D.: Am. Jour. Insan., 1919, **75**, 521.
11. Jaques, M. P.: Ind. Management, 1919, **58**, 145.
12. Lamb, J. P.: Ind. Management, 1919, **58**, 21.
13. Kelly, R. W.: Ind. Management, 1919, **58**, 35.
14. Johnson, J. F.: Ind. Management, 1919, **58**, 110.
15. Spaeth, R. A.: THIS JOURNAL, 1919, **1**, 22.

Accession no. *ML-tr.*

Author *Cobb, Stanley*

*Applications of
Psychiatry to...*

Call no. *RA790*

Hist *M24*

3D

1919

10000

